

**SWIFT-XRT-CALDB-02**

Release Date: October 15<sup>th</sup>, 2004

Prepared by: David Morris

Date Revised: 15 October 2004

Revision 2.0

Revised by: David Morris

Pages Changed: all



## **SWIFT XRT CALDB REV 2.0 RELEASE NOTE**

### **SWIFT-XRT-CALDB-02: Background Events**

#### 1. Component Files:

<b>FILENAME</b>	<b>VALID DATE</b>	<b>RELEASE DATE</b>	<b>CAL VERSION</b>
swxlrkbgpha20010101v001.evt	01 January 2001	15 October 2004	001
swxpcbkgpha20010101v001.evt	01 January 2001	15 October 2004	001
swxwtbkgpha20010101v001.evt	01 January 2001	15 October 2004	001

#### 2. Scope of Document:

This document contains a description of the creation of the background events calibration files for the XRT calibration database performed at Penn State.

#### 3. Changes:

This is the first released version of the Background Events document.

#### 4. Scientific Impact of this Update:

This is the first released version of the Background Events document.

## 5. Caveat Emptor:

*The background events files described in this document are produced from Orbit-in-the-Life test data taken at Cape Canaveral Air Force Station with a CCD temperature of  $-60$  C. This is not characteristic of the flight data, which are taken with a temperature of  $-100$  C. These files should not be used for processing flight data. That are provided only as placeholders. They consist only of events from the onboard calibration sources ( $^{55}\text{Fe}$  corner and door sources) and detector noise. The cosmic X-ray background which will be seen by the XRT in orbit is not accounted for in any way in this release of the background spectra.*

## 6. Expected Updates:

Event lists of blank fields will be collected in orbit to account for the cosmic X-ray background which is not presently accounted for in these background spectra. An update to these files will be released early during the orbital mission including the cosmic background.

## 7. Description of Background Events File Generation:

The background events file is simply an uncalibrated Level1 events file data product produced from the XRT standard processing software (*xrtpipeline*). The data used to create the background events files come from integrated observatory “Day in the Life” tests conducted at Kennedy Space Flight Center prior to launch (with CCD temperature of  $-60$  C). The data from observation 00070915001 (target id 00070915), collected from August 28, 2004 to August 29, 2004 have been run through the Swift Build 9 software (*xrtpipeline*) to produce the indicated calibration files, with appropriate modifications to the fits headers as indicated by ISAC software developers to indicate the files as calibration products.